

89-770

No. 89-

FILED  
NOV 13 1989  
JOSEPH F. SPANIOLO, JR.  
CLERK

IN THE  
**Supreme Court of the United States**  
OCTOBER TERM, 1989

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SMEC, INC.,

*Petitioner.*

v.

DATASCOPE, INC.,

*Respondent.*

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**PETITION OF SMEC, INC. FOR A WRIT OF CERTIORARI  
TO THE UNITED STATES COURT OF APPEALS  
FOR THE FEDERAL CIRCUIT**

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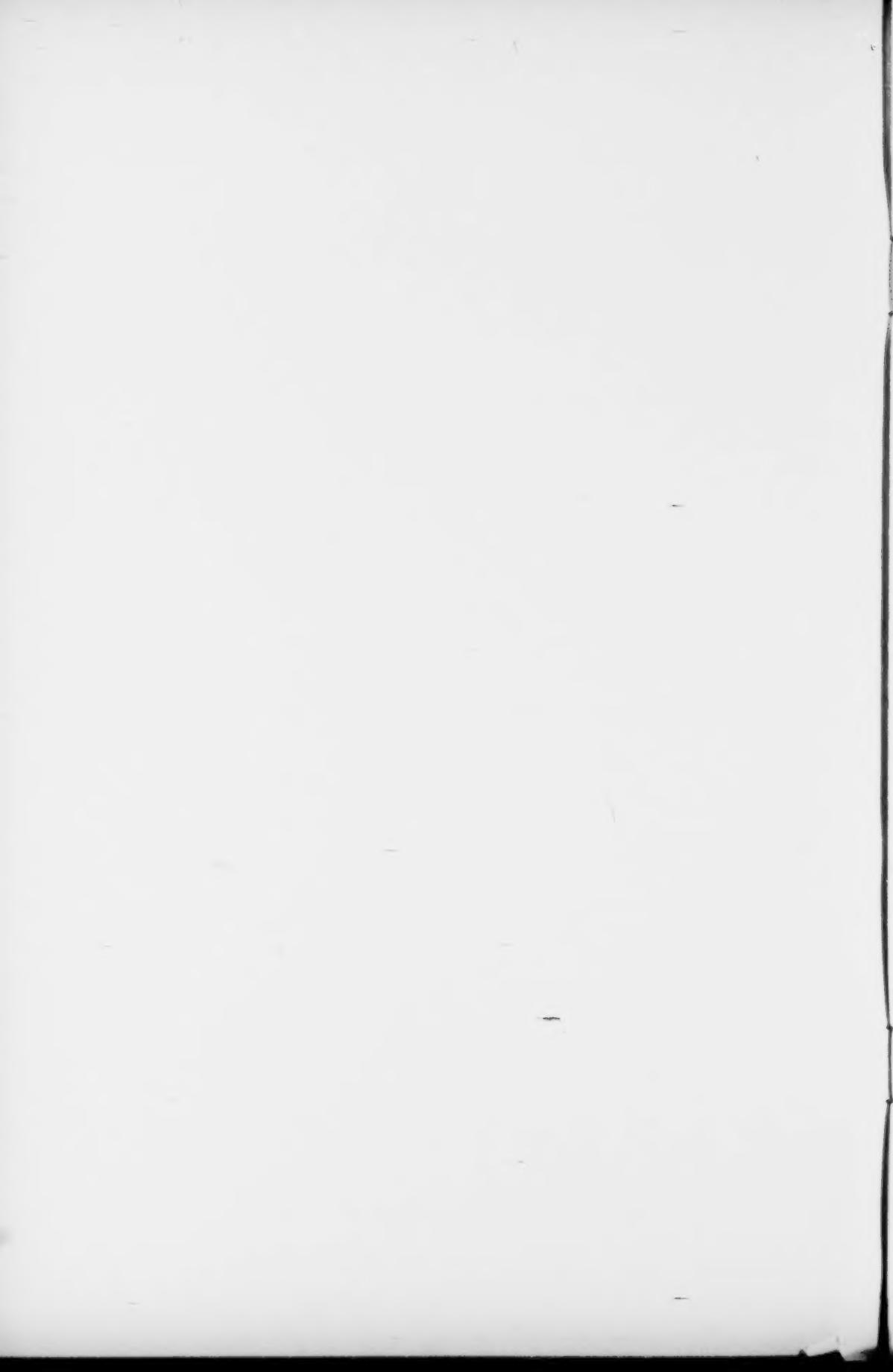
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338



## **QUESTIONS PRESENTED FOR REVIEW**

1. Whether, in reversing the District Court's finding of fact that the defendant did not willfully infringe plaintiff's patent, the United States Court of Appeals for the Federal Circuit exceeded the scope of appellate review permitted by Rule 52(a), Federal Rules of Civil Procedure, and improperly substituted its own evaluation of the credibility and subjective intent of defendant's key witness for that of the District Court?
2. Whether, in reversing the District Court's finding of fact that the plaintiff was not entitled to an award of lost profits on the domestic infringing sales made by defendant because defendant's customers would not have entered the market for the infringed product had defendant not entered that market, the Court of Appeals exceeded the scope of appellate review permitted by Rule 52(a) and improperly substituted its own determination of disputed facts for that of the District Court.

## **PARTIES**

SMEC, Inc. and Datascope, Inc. are the only parties to this proceeding. SMEC, Inc. has no parent company, subsidiaries or affiliates.

**TABLE OF CONTENTS**

	<u>Page</u>
QUESTIONS PRESENTED FOR REVIEW .....	i
TABLE OF AUTHORITIES .....	iv
OPINIONS BELOW .....	2
JURISDICTION .....	2
STATUTES AND RULES INVOLVED .....	2
STATEMENT OF THE CASE .....	3
 <b>REASONS FOR GRANTING THE PETITION</b>	
THIS COURT SHOULD EXERCISE ITS POWER OF SUPERVISION TO ENSURE THAT THE COURT OF APPEALS FOR THE FEDERAL CIR- CUIT DOES NOT IMPERMISSIBLY SUBSTI- TUTE ITS OWN DETERMINATION OF THE FACTS FOR THAT OF THE DISTRICT COURT IN VIOLATION OF RULE 52(a), FEDERAL RULES OF CIVIL PROCEDURE .....	7
CONCLUSION .....	16

**APPENDIX**

	<u>Page</u>
Opinion of the U.S. Court of Appeals for the Federal Circuit dated July 6, 1989 in Appeal Nos. 88-1266, 88-1279, 88-1104 and 89-1154 on damages .....	1a-17a
Opinion of the U.S. District Court for the District of New Jersey dated January 19, 1989 in Civ. A. No. 81-3948 on damages .....	18a-34a
Judgment of the U.S. Court of Appeals for the Federal Circuit dated July 6, 1989 on damages .....	35a
Order of the Court of Appeals denying rehearing dated August 14, 1989 .....	36a-37a
Order of the Court of Appeals declining rehearing <i>in banc</i> dated September 7, 1989 .....	38a-39a
Excerpt from testimony of Robert Rewolinski, former National Sales Manager of Datascope at damages trial on May 12, 1987 .....	40a

## TABLE OF AUTHORITIES

CASES	<u>Page</u>
<i>Anderson v. Bessemer City</i> , 470 U.S. 564 (1985) ....	7, 8, 9
<i>Bio-Rad Laboratories, Inc. v. Nicolet Instrument Corp.</i> , 739 F.2d 604 (Fed. Cir.) cert. denied 469 U.S. 1038 (1984) .....	12
<i>Datascope v. SMEC, Inc.</i> , 594 F. Supp. 1306 (D.N.J., 1984), aff'd in part and rev'd in part, 776 F.2d 320 (Fed. Cir. 1985) .....	11
<i>Datascope Corp. v. Kontron, Inc.</i> , 611 F. Supp. 889 (D. Mass. 1985), aff'd 786 F.2d 398 (Fed. Cir. 1986) .....	4
<i>Dennison Mfg. Co. v. Panduit Corp.</i> , 475 U.S. 809 (1986) on remand 810 F.2d 1561 (Fed. Cir. 1987) cert. denied, 481 U.S. 1052 (1987) .....	14
<i>Dickey-John Corp. v. International Tapetronics Corp.</i> , 710 F.2d 329 (7th Cir. 1983) .....	11
<i>Gyromat Corp. v. Champion Spark Plug Co.</i> , 735 F.2d 549 (Fed. Cir. 1984) .....	12
<i>Nickson Indus., Inc. v. Rol Mfg. Co.</i> , 847 F.2d 795, 6 USPQ2d 1878 (Fed. Cir. 1988) .....	8
<i>Panduit Corp. v. Stahlin Bros. Fibre Works</i> , 575 F.2d 1152 (6th Cir. 1978) .....	12, 14
<i>Rolls-Royce Ltd. v. GTE Valeron Corp.</i> , 800 F.2d 1101 (Fed. Cir. 1986) .....	8
<i>Spindelfabrik Suessen-Schurr Stahlecker &amp; Grill GmbH v. Schubert &amp; Salzer Maschinenfabrik Aktiengesellschaft</i> , 829 F.2d 1075 (Fed. Cir. 1987), cert. denied, 108 S.Ct. 1022 (1988) .....	9, 10
<i>State Industries, Inc. v. A.O. Smith Corp.</i> , 751 F.2d 1226 (Fed. Cir. 1985) .....	10

## TABLE OF AUTHORITIES—(Continued)

	<u>Page</u>
<b>RULES</b>	
Rule 52(a) .....	i, 2, 6, 7, 9, 14, 15
<b>STATUTES</b>	
28 U.S.C. § 1254(1) .....	2
28 U.S.C. § 1331 .....	3
35 U.S.C. § 284 .....	3
35 U.S.C. § 285 .....	3, 7
<b>OTHER</b>	
Filardi & Scheinfeld, Appellate Review of Patent Bench Trials: Is the CAFC Following Rule 52(a) ? in CURRENT DEVELOPMENTS IN PATENT LAW 1985, 9 (Practicing Law Institute, Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series Number 213, 1985 .....	14



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SMEC, Inc. respectfully petitions for a Writ of Certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit reversing the findings of the United States District Court for the District of New Jersey as to nonwillful infringement and lost profits on domestic infringing sales.

## OPINIONS BELOW

The opinion of the Court of Appeals for the Federal Circuit on damages issues is reported at 879 F.2d 820 (1989) and is reprinted herein at Appendix pages 1a-17a. The opinion of the District Court is reported at 678 F. Supp. 457 (D.N.J., 1988) and is reprinted herein at Appendix pages 18a-34a. Opinions on liability issues are reported at 594 F. Supp. 1306 (D.N.J., 1984) aff'd in part and rev'd in part 776 F.2d 320 (Fed. Cir. 1985).

## JURISDICTION

The Judgment of the Court of Appeals for the Federal Circuit was entered on July 6, 1989. (App. 35a). The motion for rehearing was denied on August 14, 1989 (App. 36a-37a) and rehearing en banc was declined on September 7, 1989. (App. 38a-39a) Jurisdiction of this Court is invoked pursuant to 28 U.S.C. § 1254(1).

## STATUTES AND RULES INVOLVED

Rule 52 (a), Federal Rules of Civil Procedure:

"Findings by the Court.

(a) Effect. In all actions tried upon the facts without a jury or with an advisory jury, the court shall find the facts specially and state separately its conclusions of law thereon. . . . Findings of fact, whether based on oral or documentary evidence, shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses. . . ."

**35 U.S.C. § 284:**

"Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

The court may receive expert testimony as an aid to the determination of damages or what royalty would be reasonable under the circumstances."

**35 U.S.C. § 285:**

"The court in exceptional cases may award reasonable attorney fees to the prevailing party."

**STATEMENT OF THE CASE**

This petition involves the damages phase of a trial in which SMEC, Inc. was found to have infringed the patent of Datascope, Inc. on a medical device known as a percutaneous intra-aortic balloon. In the liability phase of the case the District Court's finding of no literal infringement but infringement under the doctrine of equivalents was affirmed by the Court of Appeals. *Datascope v. SMEC, Inc.*, 594 F. Supp. 1306 (D.N.J., 1984) aff'd in part and rev'd in part, 776 F.2d 320 (Fed. Cir. 1985).\*

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\* This case was filed under the federal question jurisdiction provided by 28 U.S.C. §§ 1331 & 1338.

SMEC was essentially a one-man operation run by its president, Peter Schiff. Its only products were intra-aortic balloon pumps and the disposable intra-aortic balloons used with them. These products were sold to physicians and hospitals for use in a recognized method of cardiac assistance for failing hearts; to treat cardiogenic shock; to help wean a patient away from cardiopulmonary bypass; to support a patient during a difficult postoperative period; and to provide pulsation to the linear flow supplied by a cardiopulmonary bypass device. Intra-aortic balloon pumping was also used to treat patients following myocardial infarction. Prior to 1980 both Datascope and SMEC marketed intra-aortic balloons for insertion surgically. In 1980 Datascope began to market the first intra-aortic balloons which could be inserted percutaneously rather than surgically. In 1981, SMEC marketed its first percutaneous balloon which was later found to infringe United States Patent No. 4,261,339 held by Datascope. Throughout the infringing period (1981-84) there were three suppliers of percutaneous balloons, Datascope, SMEC and Kontron, Inc. During this period Datascope and Kontron divided 96% of the market and the remaining 4% went to SMEC, 678 F. Supp. at 459. (App. 22a). Following the liability determination against SMEC, Datascope commenced an infringement action against Kontron and was successful in obtaining a preliminary injunction against one of the two allegedly infringing percutaneous balloons manufactured by Kontron. See *Datascope Corp. v. Kontron, Inc.*, 611 F. Supp. 889 (D. Mass. 1985), aff'd 786 F.2d 398 (Fed. Cir. 1986). That action remains pending to date.

In the damages phase of this case, tried without a jury before the same judge who heard the liability phase, the District Court held that Datascope would be fairly compensated by a 5% royalty on the infringing sales. It rejected Datascope's contention that it was entitled to an award of its claimed lost profits on SMEC's sales of the infringing balloon because it found that Datascope had failed to carry its burden of proof that it would

have made the sales "but for" the presence of the infringing product on the market. 678 F. Supp. at 461. (App. 27a). In this connection the District Court found that (1) many of the infringing sales made by SMEC occurred because the doctor-customers had confidence in SMEC's president, Peter Schiff, and that many of SMEC's customer's would not have shifted from using (non-infringing) surgical balloons to (infringing) percutaneous balloons but for that faith in Schiff; (2) Datascope made no showing that it would have made the substantial foreign sales made by SMEC; and (3) an acceptable non-infringing substitute manufactured by Kontron was also on the market. In addition the District Court rejected Datascope's claim for enhanced damages for willful infringement and for attorneys fees. The trial court found that SMEC had sought and obtained an opinion from patent counsel as to validity and infringement and that "an honest doubt existed as to the validity and infringement of Datascope's patents." 678 F. Supp. at 465. (App. 33a). In addition the trial court (which had made the original finding of infringement in the case) noted that a finding of willful and wanton infringement is particularly inappropriate where close questions are presented regarding the infringement issue. *Id.*

On appeal by Datascope, the Court of Appeals for the Federal Circuit affirmed the District Court's finding that 5% was a reasonable royalty, but held that it had committed "clear error" in declining to award lost profits on domestic infringing sales. While upholding the refusal to award lost profits on foreign sales, the Court of Appeals held that the District Court erred in finding that the Kontron balloon was non-infringing, and in affording too much weight to the loyalty of SMEC's customers and their reluctance to shift from surgical to percutaneous balloons. (App 8a-10a). The Court of Appeals also found "clear error" in the District Court's finding that SMEC's infringement was not "willful." It held that the opinion of counsel upon which SMEC relied did not address validity or infringement under the doctrine of equivalents and that "the district court seriously underestimated Schiff's skepticism regarding the advice of coun-

sel and similarly underestimated the court's own findings about the market pressure and urgency faced by SMEC." (App. 15a). Finally, the Court of Appeals affirmed the District Court's findings as to pre- and post-judgment interest and remanded the case for calculation of the amount of lost profits on domestic infringing sales and determination of enhanced damages and attorneys fees. (App. 17a).

This petition addresses the Court of Appeals' reversal of the District Court's findings of fact as to lost profits on domestic infringing sales and willful infringement. With respect to each of these issues the Court of Appeals went beyond simply determining whether the District Court made "clear error" in its findings of fact and went on to make its own determinations of disputed facts. On the issue of Datascope's entitlement to an award of lost profits on domestic infringing sales the Court of Appeals erroneously and improperly rejected the District Court's finding that many of SMEC's customers would not have entered the percutaneous IAB market but for their confidence in SMEC president Schiff. As to willfullness, the Court of Appeals made its own determination on an issue of intent and rejected the determination of the trial judge who heard and saw the witnesses. In each respect the Court of Appeals has exceeded the proper scope of Appellate review specified in Rule 52(a), Federal Rules of Civil Procedure.

## REASONS FOR GRANTING THE PETITION

**THIS COURT SHOULD EXERCISE ITS POWER OF SUPERVISION TO ENSURE THAT THE COURT OF APPEALS FOR THE FEDERAL CIRCUIT DOES NOT IMPERMISSIBLY SUBSTITUTE ITS OWN DETERMINATION OF THE FACTS FOR THAT OF THE DISTRICT COURT IN VIOLATION OF RULE 52(a), FEDERAL RULES OF CIVIL PROCEDURE.**

Rule 52(a), Federal Rules of Civil Procedure, both by its express language and as interpreted by this Court requires that great deference be given to the ability of the trial judge to evaluate the credibility of witnesses and to decide disputed issues of fact. As this Court stated in *Anderson v. Bessemer City*, 470 U.S. 564, 575 (1985):

[w]hen findings are based on determinations regarding the credibility of witnesses, Rule 52(a) demands even greater deference to the trial court's findings; for only the trial judge can be aware of the variations in demeanor and tone of voice that bear so heavily on the listener's understanding of and belief in what is said.

\* \* \*

[W]hen a trial judge's finding is based on his decision to credit the testimony of one of two or more witnesses, each of whom has told a coherent and facially plausible story that is not contradicted by extrinsic evidence, that finding, if not internally inconsistent, can virtually never be clear error. 470 U.S. at 575.

In this case the Court of Appeals acknowledged the applicability of that standard to its review of issues presented herein stating:

"Because '[t]he methodology of assessing and computing damages under 35 U.S.C. § 284 is within the sound discretion of the district court, [t]o prevail on appeal [Datascope] must convince us that the dis-

trict court abused its discretion by basing its award on clearly erroneous factual findings, legal error, or a manifest error of judgment." *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 789, 6 USPQ2d 1878, 1879 (Fed. Cir. 1988)."

App. 6a. The Court of Appeals decision, however, in the two respects addressed in this petition simply replaces the findings of the District Court with those of its own.

### 1. *The Finding of Willful Infringement*

The Court of Appeals for the Federal Circuit has frequently pointed out that a determination of willfulness is a matter for which the trial judge, as opposed to an appellate court reviewing a cold record, is particularly well-suited. In *Rolls-Royce Ltd. v. GTE Valeron Corp.*, 800 F.2d 1101, 1110 (Fed. Cir. 1986) that Court noted, in applying *Anderson v. Bessemer City, supra*, as follows:

In respect of willfulness, there cannot be hard and fast *per se* rules. The district court, considering the evidence before it and the testimony and demeanor of the witnesses, must in each case determine whether an infringer has discharged its affirmative duty of exercising due care. Here, the district court found, in light of the totality of the circumstances, that GTE had recognized and discharged that duty.

\* \* \*

This court does not sit to reweigh the evidence presented to the district court, nor will it draw its own inferences, nor make its own fact findings. It will not reverse unless the inferences drawn and facts found by the trial court are on the full record so unsupported as to have been the result of clear error. The drawing of inferences, particularly in respect of an intent-implicating question such as willfulness, is peculiarly within the province of the fact finder that observed the witnesses. Lastly, as above indicated, where two inter-

pretations or inferences are permissible, this court must not substitute its evaluation of testimony for that of the district court.

The Court of Appeals, in reversing the District Court's finding of non-willfulness and *mandating* a finding of willfulness has violated Rule 52(a) as interpreted by this Court in *Anderson* and has violated its own interpretation of the Rule as it applies to a finding of willfulness. This error is perhaps best illustrated by the Court of Appeals' own language in reversing the District Court's finding on willful infringement:

"Our review of the record convinces us that the district court seriously underestimated Schiff's skepticism regarding the advice of counsel and similarly underestimated the court's own findings about the market pressure and urgency faced by SMEC." Id. at 17.

The Court of Appeals was apparently referring to the District Court's findings which led it to award a royalty of 5% rather than a royalty ranging from 2% to 4%, which represented a standard royalty in the field. The Court of Appeals does not explain why it was inconsistent or "clearly erroneous" for the District Court to find that market pressure would cause SMEC to pay a slightly higher than normal hypothetical royalty and at the same time to conclude that SMEC's decision to market its product did not constitute willful infringement.

The facts of the case, many of which are not discussed by the Court of Appeals, make it clear that the District Court's findings were amply supported by the record and, at a minimum, did not require a finding of willful infringement. Significantly, the Court of Appeals did not address the fact that SMEC's product was found not to literally infringe Datascope's balloon. The issue addressed by SMEC's independent counsel in his opinion was whether the substantial differences between what was ultimately found to be infringing and Datascope's patent claims precluded a finding of infringement. The facts of this case are, thus, a far cry from those in *Spindelfabrik Suessen-Schurr*

*Stahlecker & Grill GmbH v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft*, 829 F.2d 1075 (Fed. Cir. 1987), cert. denied, 108 S.Ct. 1022 (1988), upon which the Court of Appeals relied in concluding that the District Court underestimated its own findings on skepticism and market pressure. In that case the District Court's finding of willfulness was affirmed based upon the fact that the defendant did not obtain the advice of United States counsel, but relied upon the opinion of German in-house counsel, had not made any good faith effort to "design around" the patent and the knowingly used protected technology. 829 F.2d 1084. Here, SMEC sought the opinion of independent counsel, received an unequivocal opinion of non-infringement, and the product it marketed was substantially different from that of Datascope's.

The Court of Appeals, in finding willful infringement, makes no reference to these differences which led it to affirm the finding of no literal infringement. 776 F.2d at 325. In *State Industries, Inc. v. A.O. Smith Corp.*, 751 F.2d 1226 (Fed. Cir. 1985), similar circumstances led it to reverse a trial court's finding of willfulness. In that case the same Court noted:

"Conduct such as Smith's, involving keeping track of a competitor's products and designing new and possibly better or cheaper functional equivalents is the stuff of which competition is made and supposed to benefit the consumer. One of the benefits of a patent system is its so-called 'negative incentive' to 'design around' a competitor's products, even when they are patented, thus bringing a steady flow of innovations to the marketplace. It should not be discouraged by punitive damage awards except in cases where conduct is so obnoxious as clearly to call for them. The world of competition is full of 'fair fights,' of which this suit seems to be one".

*Id.* at 1235-6. In this case the SMEC infringing balloon addressed one of the principal short-comings of the Datascope balloon, its frequent failure to unwind in the patient, by introducing an extended support member and a positive winding knob. These innovations, which were characterized by the District Court at *supra*, an "improvement", *Datascope v. SMEC, Inc.*, 594 F. Supp. 1314. Achieved success in the marketplace, enabled more rapid acceptance of the percutaneous technique and were even adopted by Datascope. (App. 40a).

It is perhaps conceivable that a finder of fact might nevertheless conclude, notwithstanding the above, that SMEC willfully infringed. The Court of Appeals, however has held that any finding but willfulness would be clearly erroneous. Such a holding ignores both the plain language of Rule 52(a) and its rationale.

Here, the trial judge heard and saw the testimony of Mr. Schiff over the course of several days and two trials. The Court of Appeals saw only a cold record. For the Court of Appeals to conclude that Chief Judge Fisher's conclusion that an "honest doubt" existed in the mind of Schiff as to validity and infringement was "clearly erroneous" it must necessarily set aside Judge Fisher's finding as to credibility.

In declining to find that willful infringement had been committed the District Court noted that such a finding is ordinarily inappropriate where close questions as to infringement existed, citing *Dickey-John Corp. v. International Tapetronics Corp.*, 710 F.2d 329, 348 (7th Cir. 1983) and the dissenting opinion of Judge Davis in the Court of Appeals decision affirming the judgment of liability. 678 F. Supp. at 465 (App. 34a). The Court of Appeals brushes this finding aside in a footnote which points out that in the *Dickey-John* case the close question was on validity and that the defendant in that case had clearly infringed. In this case however, a "close question", as can be readily seen from the District Court's opinion on liability, 594 F. Supp. 1306, 1315 (D.N.J., 1984) was on infringement itself. Finally, who can better gauge the "closeness" of a question than the trial judge who decided the question and whose

decision was affirmed on the basis that it was not "clearly erroneous"? See 776 F.2d 320, 328 (Fed. Cir. 1985).

## 2. *Lost Profits*

The Court of Appeals direction to the District Court to award lost profits on domestic sales, similarly runs afoul of Rule 52(a). The District Court declined to award Datascope its claimed lost profits because it found that Datascope had failed to establish that it would have made the infringing sales "but for" the presence of the infringing product on the market. *Bio-Rad Laboratories, Inc. v. Nicolet Instrument Corp.*, 739 F.2d 604, 616 (Fed. Cir. 1984) cert. denied 469 U.S. 1038 (1984); *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 553 (Fed. Cir. 1984). In addressing this issue the District Court followed the four-part test set forth in *Panduit Corp. v. Stahlin Bros. Fibre Works*, 575 F.2d 1152, 1156 (6th Cir. 1978):

To obtain as damages the profits on sales he [the patentee] would have made absent the infringement, i.e., the sales made by the infringer, the patent owner must prove: (1) demand for the patented product, (2) absence of acceptable noninfringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made.

In addressing the third element of this test, the manufacturing and marketing capability of Datascope to exploit the demand, the District Court considered the testimony of several of SMEC's physician customers and made specific findings based upon that testimony.

"SMEC entered the market for percutaneous balloons in March, 1981. At that time, many doctors were wary of the percutaneous method for medical reasons. Although a precise moment in time is unascertainable, the percutaneous procedure gradu-

ally gained acceptance and by 1983-1984 had become the method of choice among doctors.

Despite the early skepticism in the medical community, many doctors purchased the SMEC balloon in 1981. This is due primarily to the high esteem in which the doctors held Peter Schiff, the President of SMEC, and the doctors' previous experience with SMEC's products. These doctors testified that it was because of Schiff that they purchased the SMEC balloon at a point in time earlier than they would normally have adopted the percutaneous method."

678 F. Supp. at 459 (App. 22a-23a). While the District Court also noted that at some point these doctors would have adopted the percutaneous method, *Id.* at 460 (App. 23a), it held that:

There is nothing in the record to suggest that either Datascopic or Kontron could have captured the early sales made by SMEC, in view of both the skepticism of the technique within the medical community at that time, and the loyalty of SMEC's customers. Indeed, the evidence establishes that, at the time, SMEC's customers would not have adopted the percutaneous balloons manufactured by any other company. In all probability, these sales would not have been made.

*Id.* at 462 (App. 29a).

The Court of Appeals, in asserting clear error, suggests that the SMEC position "presumes a legitimate choice between two manufacturers of percutaneous IABs." (App. 10a). This simply misstates the issue. The legitimate choice which the District Court found existed was not between two manufacturers of *percutaneous* IABs but between a manufacturer of a non-infringing *surgical* IAB and Datascopic's percutaneous IAB. The District Court simply found that the SMEC customers would have stayed with the proven surgical design until a SMEC percutaneous balloon was on the market and would not have purchased the Datascopic percutaneous balloon "but for" the SMEC

infringement and concluded that it would not be appropriate to award Datascope its "lost profits" on sales it would not have made in any event. The Court of Appeals' erroneous view of the evidence and the arguments of the parties is a principal reason why the findings of fact made by the trial judge are entitled to deference. Since the four-part *Panduit* test requires the plaintiff to establish all four elements to obtain lost profits its failure to establish this third element (marketing capability to exploit the demand) is sufficient to sustain the District Court's refusal to award lost profits on domestic sales notwithstanding the Court of Appeals' reversal on the second element of the *Panduit* test (absence of acceptable non-infringing substitutes). *Panduit Corp. v. Stahlin Bros. Fibreworks, supra.* 575 F.2d at 1156.

### 3. *The Court Should Exercise Its Supervisory Authority*

This is not the first time that the Court of Appeals for the Federal Circuit has been found to have gone beyond its authority under Rule 52(a). In *Dennison Mfg. Co. v. Panduit Corp.*, 475 U.S. 809 (1986) *on remand* 810 F.2d 1561 (Fed. Cir. 1987) *cert. denied*, 481 U.S. 1052 (1987), this Court held that the Federal Circuit Court of Appeals erred in reversing a district court's determination that a patent was obvious without stating why Rule 52(a) was inapplicable to the district court's findings and remanded the matter for further findings. The Court has been criticized by the patent bar as well. In Filardi & Scheinfeld, *Appellate Review of Patent Bench Trials: Is the CAFC Following Rule 52(a)?*, in **CURRENT DEVELOPMENTS IN PATENT LAW 1985**, 9 (Practicing Law Institute, Patents, Copyrights, Trademarks, and Literary Property Course Handbook Series Number 213, 1985), the authors point out numerous cases in which, in the author's view, the CAFC departed from the restrictions of Rule 52(a) in reviewing and reversing trial court findings of fact. The authors contend:

[T]here is unquestionably an urgent need for the Supreme Court, upon grant of certiorari and under its power of supervision, to evaluate the CAFC's role as reviewer of trial court factual determinations. The

fundamental concern is that the CAFC has so usurped the power and function of the trial court as fact finder as to be disruptive of federal judicial process. If the purpose of the CAFC in its creation was to establish order in the patent system, such can never be achieved where the CAFC permits unsuccessful litigants to retry their cases at the appellate level. The result will only increase the number of appeals and unduly burden the CAFC docket while at the same time decrease the certainty and finality of judgments, thereby undermining the very purpose and function of the CAFC.

*Id.* at 17-18.

The Court of Appeals opinion in this case demonstrates that the "urgent need" for Supreme Court supervision discussed above still exists. Here, the Court of Appeals has made its own findings with respect to the willful intent and credibility of defendant and has ignored and misinterpreted a crucial finding by the District Court with respect to the measure of damages. It is respectfully submitted, therefore, that the need for the uniform application of the Rule 52(a) standard of review of trial court findings in all circuits and the orderly trial and review of patent and other claims compels the issuance of a Writ of Certiorari in this case.

**CONCLUSION**

For all of the foregoing reasons the Petition should be granted and a Writ of Certiorari should be issued.

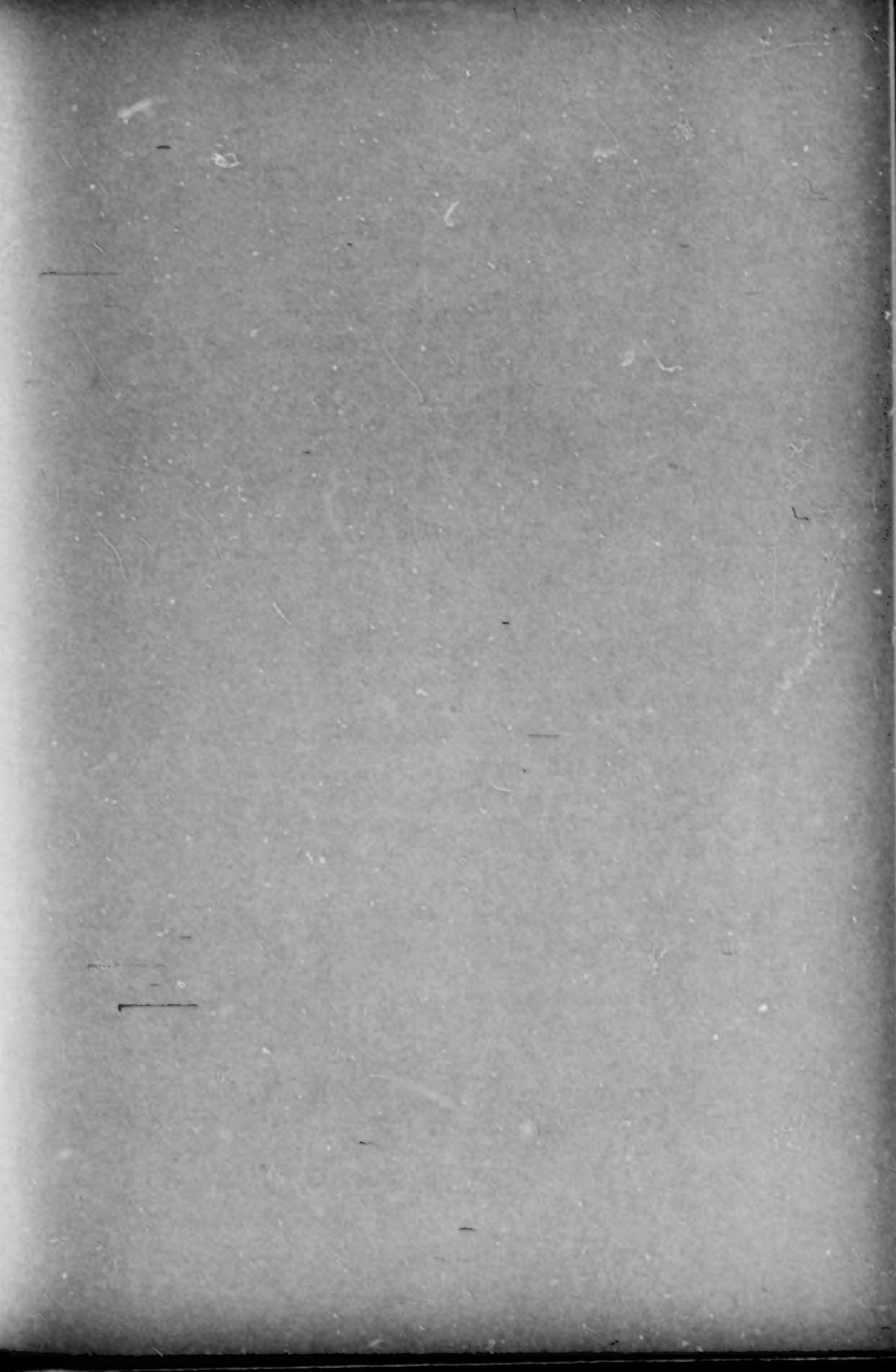
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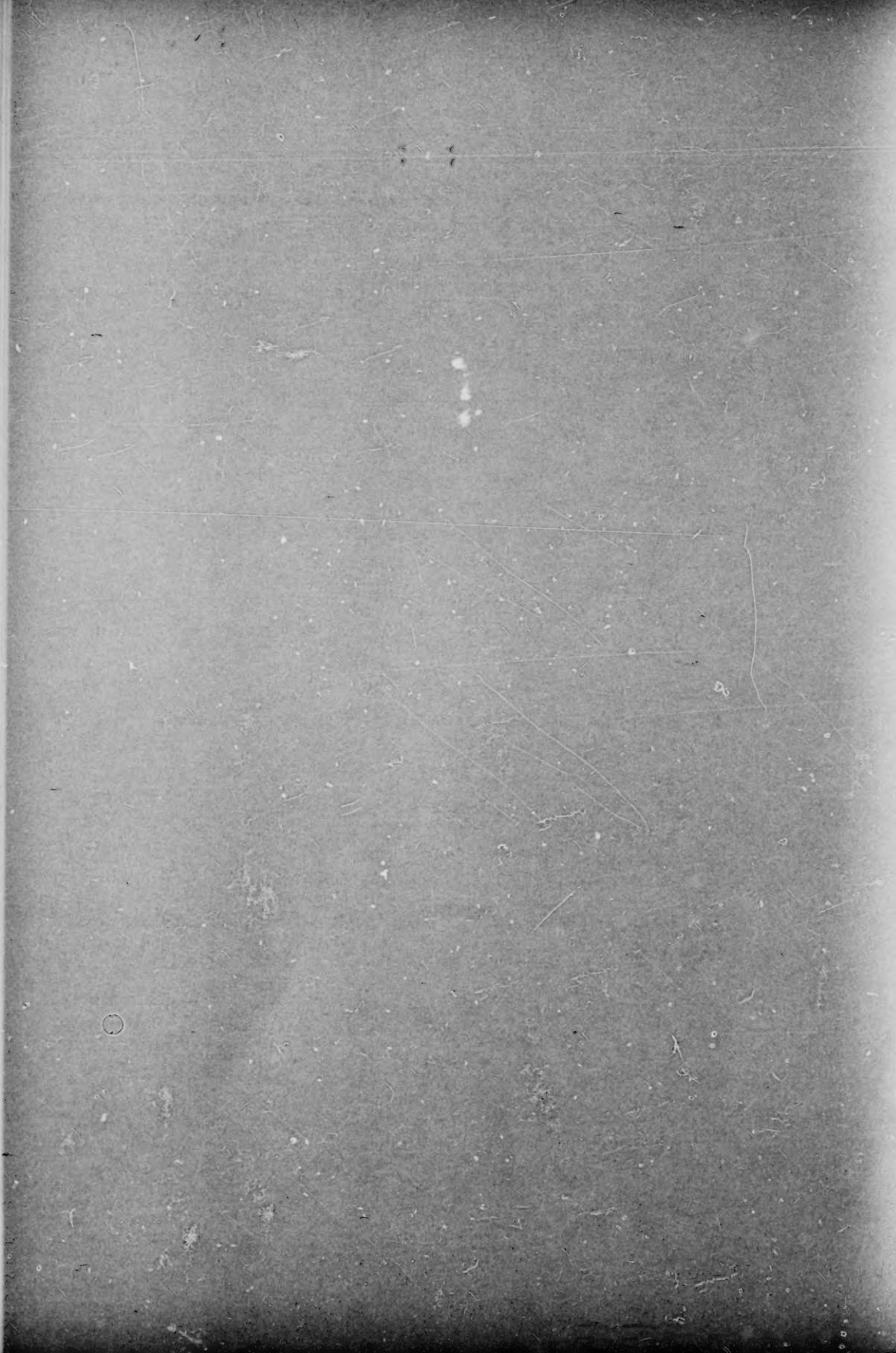
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November 10, 1989





**United States Court of Appeals  
for the Federal Circuit**

88-1266, -1279 and 89-1104, -1154

**DATASCOPE CORP.,**

*Plaintiff-Appellant,*

v.

**SMEC, INC.,**

*Defendant/Cross Appellant.*

*Stevan J. Bosses*, of Fitzpatrick, Cella, Harper & Scinto, New York, New York, argued for plaintiff-appellant. Of counsel were *Nina Shreve* and *Errol B. Taylor*, of Fitzpatrick, Cella, Harper & Scinto, New York, New York.

*Charles A. Reid, III*, of Shanley & Fisher, Morristown, New Jersey, argued for defendant/cross-appellant. With him on the brief were *Arthur R. Schmauder* and *Renate A. Coombs* of counsel, of Shanley & Fisher, Morristown.

Appealed from: United States District Court  
for the District of New Jersey

JUDGE FISHER

**United States Court of Appeals  
for the Federal Circuit**

88-1266, -1279 and 89-1104, -1154

**DATASCOPE CORP.,**

*Plaintiff-Appellant.*

v.

**SMEC, INC.,**

*Defendant/Cross Appellant.*

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**Decided: July 6, 1989**

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Before MARKEY, *Chief Judge*, FRIEDMAN and ARCHER,  
*Circuit Judges*. MARKEY, *Chief Judge*.

Datascope Corp. (Datascope) appeals from a judgment of the United States District Court for the District of New Jersey, 678 F. Supp. 457, 5 USPQ2d 1963 (D.N.J. 1988), requiring SMEC, Inc. (SMEC) to pay reasonable royalty damages of \$113,442.05 and finding SMEC's infringement not willful, and from orders for annually compounded prejudgment interest and post-judgment interest at the Treasury bill rate. We affirm-in-part, reverse-in-part, and remand-in-part the court's damage award; reverse the finding of nonwillful infringement; remand

for determination of enhanced damages and attorney fees; and affirm the prejudgment and post-judgment interest awards.<sup>1</sup>

## BACKGROUND

Datascope owns United States Patent No. 4,261,339 ('339 patent) on a percutaneous intra-aortic balloon catheter (percutaneous IAB). After this court affirmed the district court's judgment that SMEC infringed the '339 patent under the doctrine of equivalents and had not shown the '339 patent to be invalid, 776 F.2d 320, 227 USPQ 838 (Fed. Cir. 1985), the district court conducted a trial on damages.<sup>2</sup> On January 19, 1988, the court issued an order and final judgment that: (1) made the preliminary injunction permanent; (2) awarded \$113,442.05 to Datascope, "representing a reasonable royalty, equivalent to 5% of the infringing sales"; and (3) directed SMEC to pay prejudgment interest and costs.

Two days later, the court filed its opinion. Noting 35 U.S.C. § 284's requirement of "damages adequate to compensate" and this court's precedent that a successful claimant may recover its lost profits where it shows it would have made the sales "but for" the infringing activity, *see, e.g., Bio-Rad Laboratories, Inc. v. Nicolet Instrument Corp.*, 739 F.2d 604, 616, 222 USPQ 654, 663 (Fed. Cir. 1984), the court analyzed whether Datascope was "entitled" to its lost profits or whether it "is entitled only to a reasonable royalty." 678 F. Supp. at 458, 5 USPQ2d at 1964-65. Using the recognized four-prong test of *Panduit Corp. v. Stahlin*

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<sup>1</sup> SMEC's filing of its "cross-appeal" for the "sole purpose of preserving its right to offer arguments in support of the judgment" is improper. Appellees always have the right to assert alternative grounds for affirming the judgment that are supported by the record. *See Jaffke v. Dunham*, 352 U.S. 280, 281 (1957).

<sup>2</sup> We do not here explain the involved technology or reproduce the claims in suit, matters fully explored in *Datascope Corp. v. SMEC, Inc.*, 594 F. Supp. 1036, 224 USPQ 694 (D.N.J. 1984), *aff'd in pertinent part and rev'd in part*, 776 F.2d at 320, 227 USPQ at 838. Further, we presume knowledge of the district court's published opinion on damages, discussing here only those portions particularly relevant to our disposition of the appeal.

*Bros. Fibreworks*, 575 F.2d 1152, 1156, 197 USPQ 726, 729-30 (6th Cir. 1978), the district court denied Datascope its lost profits because it had not "carried its burden of proof in establishing entitlement to lost profits." 678 F.2d at 461, 5 USPQ2d at 1967. The court specifically found that Datascope failed to prove elements two and three of the Panduit test—absence of acceptable noninfringing substitutes and manufacturing and marketing capability to exploit the demand.

The court based the former finding on subsidiary findings that Kontron, Inc.'s (Kontron) dual lumen IAB does not infringe the '339 patent and that it is an acceptable substitute. *Id.* at 460, 462, 5 USPQ2d at 1966-68.<sup>3</sup> It based the latter finding on other subsidiary findings that: (1) "in early 1981 and for a short time thereafter, the market demand for the product was significantly less than it would later become" (678 F. Supp. at 461, 5 USPQ2d at 1967); and (2) Datascope made no showing it could have "captured" SMEC's foreign sales (13% of SMEC's infringing sales), having no sales representatives assigned to foreign customers and never attempting to make inroads "in the area." *Id.* at 461-62, 5 USPQ2d at 1967.

The court stated:

The evidence clearly shows that many of the sales made [in early 1981 and for a short time thereafter] by SMEC were made because of the doctors' confidence in [SMEC's President] Schiff. Further, the evidence showed that many of SMEC's customers would not have switched from using surgical balloons to percutaneous balloons but for that faith in Schiff.

*Id.*

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<sup>3</sup> The district court supplied information on the Kontron dual lumen IAB in its opinion in this case, 678 F. Supp. at 460-62, 5 USPQ2d at 1966. More information can be found in *Datascope Corp. v. Kontron, Inc.*, 611 F. Supp. 889, 227 USPQ 320 (D. Mass. 1985), *aff'd* 786 F.2d 398, 229 USPQ 41 (Fed. Cir. 1986), an ongoing case in which Datascope alleges that Kontron's dual lumen IAB infringes the '339 patent.

The court then hypothesized a negotiation between willing licensee and licensor at the time infringement began. It rejected SMEC's suggested royalties of 1.75%, 2.5%, or in the range of 2%-4%, and awarded a 5% royalty because "circumstances as they existed would have compelled willing negotiators to go even beyond a 4% royalty." *Id.* at 464, 5 USPQ2d at 1968-69.

The district court found SMEC's infringement nonwillful. It credited SMEC's obtaining of an opinion of counsel "concerning the validity and possible infringements" of Datascope patents "at a time when Schiff was still attempting to develop his noninfringing prewrapped prototype," *id.* at 464, 5 USPQ2d at 1970, and concluded that "an honest doubt existed as to the validity and infringement of Datascope's patents." *Id.* at 464-65, 5 USPQ2d at 1970. It particularly noted that a panel of this court, "in affirming the judgment of liability was not unanimous." *Id.* at 465, 5 USPQ2d at 1970. Based on its finding of nonwillfulness, the district court denied increased damages under 35 U.S.C. § 284 and attorney fees under 35 U.S.C. § 285.

In supplemental orders, the court awarded Datascope \$57,354.18 in prejudgment interest, representing the prime rate compounded annually, and post-judgment interest at the Treasury bill rate. *See* 28 U.S.C. § 1961.

## ISSUES

- I. Whether through clear errors of fact and law the district court abused its discretion in awarding damages.
- II. Whether the court's finding of nonwillful infringement is clearly erroneous.
- III. Whether the court abused its discretion in awarding prejudgment and postjudgment interest.

## I. Damages

### A. Standard of Review

Because “[t]he methodology of assessing and computing damages under 35 U.S.C. § 284 is within the sound discretion of the district court, [t]o prevail on appeal [Datascope] must convince us that the district court abused its discretion by basing its award on clearly erroneous factual findings, legal error, or a manifest error of judgment.” *Nickson Indus., Inc. v. Rol Mfg. Co.*, 847 F.2d 795, 798, 6 USPQ2d 1878, 1879 (Fed. Cir. 1988) (citations omitted).

### B. Lost Profits

Datascope argues errors of fact and law in the district court’s determination that it did not prove its “entitlement” to its lost profits as compensation for SMEC’s infringement. We review asserted factual errors cognizant of the clearly erroneous standard of Fed. R. Civ. P. 52(a). *See Anderson v. City of Bessemer City, N.C.*, 470 U.S. 564, 573 (1985) (citing *United States v. United States Gypsum Co.*, 333 U.S. 364, 395 (1948)).

#### 1. Acceptable Noninfringing Alternative

Datascope says the district court’s finding that Kontron’s dual lumen IAB was an acceptable noninfringing alternative is clearly erroneous. We agree.<sup>4</sup> Perhaps led astray by SMEC’s cross-examination of Datascope witness Hanson, which focused only on comparison of the hollow support means of the Kontron IAB and the “rod” or “wire” (hence “solid”) support means of embodiments disclosed in the ’339 specification, the district court lost sight of this court’s repeated caution that it is *claims*, not commercial embodiments, that are infringed. *See, e.g., Amstar Corp. v. Envirotech Corp.*, 823 F.2d 1538, 1545, 3

<sup>4</sup> Because we agree with Datascope that the court clearly erred in finding the Kontron dual lumen IAB to have been established as a noninfringing alternative, we do not discuss Datascope’s argument that its product was superior to Kontron’s.

USPQ2d 1412, 1417 (Fed. Cir. 1987). The claims of the '339 patent do not limit "support means" to solid objects and the specification states in several places that illustrations are provided for purposes of "example and not limitation." SMEC proffered no evidence suggesting the propriety of anything other than a plain and ordinary reading of the claims. Indeed, SMEC presented no testimony whatever, but relied entirely on its cross-examination of Hanson.

Also clearly erroneous is the district court's finding that the dual lumen IAB of Kontron could not infringe because the Datascope product if operated as a dual lumen device would cause blood and gas to mix (a "fact" supported in the appendix before this court only by an assertion of counsel). Again, it is the claims that control and the claims of the '339 patent do not limit Datascope to any particular configuration here relevant. Nor has SMEC offered any legal justification whatever for limiting the claims.

Contrary to SMEC's argument in its brief, the district court's finding cannot be supported by the ongoing litigation between Datascope and Kontron. That case has not yet resulted, and may never result, in a finding of noninfringement by Kontron's dual lumen IAB. Moreover, the district court there imposed a preliminary injunction based in part on Datascope's showing of likelihood of success on the merits, and this court affirmed. Nothing in the appeal from that injunction supports a finding here that Kontron's dual lumen IAB is a noninfringing substitute. We are confined here to the record in the case before us. It is beyond cavil that a case is decided on and only on the evidence as presented in that case.<sup>8</sup> Whether Kontron will succeed in submitting evidence in support of noninfringement must await the event.

Both parties cite non-record, post-appeal events. SMEC says one claim has been rejected on reexamination and

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<sup>8</sup> That principle will, of course, apply to any supposed relationship between the outcome of this appeal and the ongoing Datascope-Kontron litigation.

Datascope says that rejection has been appealed. Except for noting their impropriety, we disregard both assertions.

We also reject SMEC's argument for affirming the judgment on the alternative ground that the district court was clearly erroneous in refusing to find SMEC's 1980 Nontwisting Prewrapped Balloon and "Sidewinder" balloons to be acceptable noninfringing alternatives. As found by the district court, SMEC's President, Schiff, had doubts about the efficacy of the 1980 model (notwithstanding his correctly discounted hindsight testimony at trial) and SMEC never marketed it. 678 F. Supp. at 460-61, 5 USPQ2d at 1966. The Sidewinder needed FDA approval to be marketed, but SMEC did not obtain that approval until October 1984. *Id.* at 461, 5 USPQ2d at 1966-67. SMEC adopts the frequent and foolish appellate ploy of citing only such bits of evidence as may support its view, while ignoring the wealth of evidence that establishes the district court's well reasoned findings to have been not clearly erroneous.

We are surprised at SMEC's reliance on *Smith International, Inc. v. Hughes Tool Co.*, 229 USPQ 81 (C.D. Cal. 1986), as authority. The district court's judgment in that case was vacated and the case was remanded with instructions to dismiss the complaint because the case became moot on appeal. 839 F.2d 663, 664, 5 USPQ2d 1686, 1687 (Fed. Cir. 1988).

Here there were not two permissible views of the Kontron IAB evidence, from which the factfinder chose one. See *Anderson*, 470 U.S. at 574. SMEC had the opportunity to proffer convincing rebuttal evidence of noninfringing substitutes but simply did not do so. Further, as discussed above, its cross-examination confused the issue by comparing the Kontron device to Datascope's commercial embodiment instead of to the claims of the '339 patent.

There is, on the other hand, no basis in the record for the district court's view that Datascope failed to prove the absence of acceptable noninfringing alternatives. The only evidence of record is the testimony of Datascope witness Hanson. That testi-

mony, supplemented by Plaintiff's Exhibit PD-4A (a chart comparing elements of the Kontron dual lumen IAB to the '339's claims) was sufficient on this record to carry Datascope's burden of proving that the Kontron dual lumen IAB infringes the claims of the '339 patent. The record developed at trial forces us to the conclusion that the finding that the Kontron device was a noninfringing alternative was clearly erroneous.

## 2. *Manufacturing/Marketing Capability To Exploit the Demand*

The district court based its findings that Datascope had not met its burden of proving manufacturing and marketing capability on subsidiary findings that (1) many of SMEC's customers would not have entered the percutaneous IAB market but for their confidence in SMEC president Schiff; and (2) Datascope would not have made SMEC's sales to foreign customers. Datascope argues that those findings are clearly erroneous. Datascope is right on finding (1) and wrong on finding (2).

### SMEC's Customers

We note, first, the logical error in considering the preference of customers for the infringer as a source of supply. That preference, if it exists, bears no relevance to element three of the *Panduit* test, which concerns only the manufacturing/marketing capability of the patentee to meet the demand. The demand which a patentee must have the capacity to meet is measured by the total sales, by the patentee and the infringer, of the patented product. In this case there is no question that Datascope had the manufacturing and marketing capability and could have sold to every domestic SMEC customer.

Witnesses testified, and the court found, that purchasers of the infringing product prefer to buy from SMEC, rather than from Datascope. (Unsurprisingly, all those witnesses being long-standing SMEC customers.) The court also found, however, that: "SMEC lost customers during the period that Datascope was the only company on the market with the percutaneous bal-

loon" (678 F.2d at 463, 5 USPQ2d at 1969); "the evidence revealed a certain urgency on SMEC's part prior to entering the percutaneous market" (*id.*); and "Schiff considered Datascope's introduction of a percutaneous balloon to be a significant development in the market." *Id.* at 463, 5 USPQ2d at 1968. Those subsidiary findings undermine the ultimate finding that Datascope had not proven to "a reasonable probability that, but for the infringement, it would have made the sales that were made by the infringer." *Del Mar Avionics v. Quinton Instrument*, 836 F.2d 1320, 1326, 5 USPQ2d 1255, 1260 (Fed. Cir. 1988).

SMEC's discussion of the evidence presumes a legitimate choice between two manufacturers of percutaneous IABs. That evidence, however, is irrelevant when, as here, Datascope would, but for infringing devices, have been the sole supplier of percutaneous IABs.

The question at this point in the appeal, rightly stated, is whether SMEC's showing of loyalty of some of its customers overcame the reasonable inference (when the patentee and infringers are the only suppliers of the patented product) that the patent owner would have made the sales made by the infringers. *Id.* (citing *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065, 219 USPQ 670, 675 (Fed. Cir. 1983)). It did not. The district court found, and SMEC does not challenge the finding, that those sales would have been made by Datascope (albeit later): "[R]egardless of the doctors' high regard for Schiff and SMEC, these doctors would have adopted the percutaneous method because of [its] advantages [over the prior art methods]." 678 F. Supp. at 460, 5 USPQ2d at 1966. The district court also noted (and SMEC admits in its brief) that percutaneous IABs overcame the initial reluctance of doctors and became "the method of choice." *Id.* at 459, 5 USPQ 2d at 1965.

It is clear that the district court, in arriving at its ultimate finding on element three of the *Panduit* test, applied too rigorous a standard of proof. "The patentee is not obligated to negate

every possibility that a purchaser might not have bought the patentee's product instead of the infringing one, or might have foregone the purchase altogether." *Delmar*, 836 F.2d at 1326, 5 USPQ2d at 1260. The error in the ultimate finding is further illustrated by the district court's unchallenged findings that: Datascope proved a steadily increasing demand for percutaneous IAB's over the infringing period (678 F. Supp. at 464, 5 USPQ2d at 1969); the percutaneous method is medically superior to the surgical method (*id.* at 459-60, 5 USPQ2d at 1965-66); and the chief impediments to immediate adoption of percutaneous IAB's were inertia and the need for test results. *Id.* F.2d at 459-60, 5 USPQ2d at 1965-66.

Our review of the record related to the finding that Datascope failed to carry its burden of proof of entitlement to lost profits on domestic sales under the *Panduit* test leads us inexorably to the "definite and firm conviction that a mistake has been committed." *United States v. Gypsum Co.*, 333 U.S. 364, 395 (1948); *see Anderson*, 470 U.S. at 573; Fed. R. Civ. P. 52(a). We therefore must reverse that finding.<sup>8</sup>

#### *Foreign Sales*

Datascope says the court's finding that it "made no showing that it could have captured the sizable number of foreign sales made by SMEC" is clearly erroneous and asserts that "the only inference that can be drawn from the evidence presented is that Datascope would have made those sales by virtue of Datascope's worldwide presence." We are unconvinced of clear error.

Exactly what Datascope means by "evidence presented" is a mystery. Its main brief contains this: "Datascope sells outside

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<sup>8</sup> If there were any doubt, and there is none, we would resolve it against SMEC. As this court stated in *Kori Corp. v. Wilco Marsh Buggies & Drag-lines*, 761 F.2d 649, 655, 225 USPQ 985, 989 (Fed. Cir.) (citing *Story Parchment Co. v. Paterson Parchment Co.*, 282 U.S. 555, 563 (1931)), cert. denied, 474 U.S. 902 (1985): "Fundamental principles of justice require us to throw any risk of uncertainty upon the wrongdoer rather than upon the injured party."

this country as well as within it [A. 952-56], and Datascope even has foreign subsidiaries in Germany, the Netherlands and the United Kingdom." Its reply brief notes, without record citation, "facts" such as its "extensive worldwide presence," and that its "size and reputation," and "substantial advertising" would have led to foreign sales. The court's search of the record found no support whatever for Datascope's oft-repeated statement that it has "foreign subsidiaries". Our search of the record shows that the pages Datascope cites, 952-54 and 956 contain no evidence even touching on foreign sales; page 955 contains the naked statements in an accountant's testimony that "sales are made to customers overseas" and sales to foreign customers "are very significant."

In sum, no "evidence presented" supports Datascope's argument that the only permissible inference was the one it wanted. On the contrary, the record provides clear support for the court's findings that (1) "[a]lthough [Datascope's] sales team was divided into regions throughout the United States, no sales representatives were assigned to foreign customers"; and (2) "no attempt was ever made at making inroads in this area." In view of those findings, we cannot say that Datascope's "evidence," in light of the entire record, was so compelling as to render any contrary view of that evidence implausible. Accordingly, we affirm the denial of lost profits on SMEC's foreign sales. *Anderson*, 470 U.S. at 574.

### 3. Conclusion on Lost Profits

We vacate the award of a reasonable royalty on SMEC's domestic infringing sales and remand for calculation of the appropriate lost profits award. We affirm the court's denial of lost profits on SMEC's foreign sales.

### C. Reasonable Royalty

It is undisputed that Datascope is entitled to a reasonable royalty on SMEC's foreign infringing sales. Pointing to "its pol-

icy of not licensing," its 100% control of the percutaneous market when infringement began, "the [large] gross profit margins enjoyed by both Datascope and SMEC on these products" (71% for SMEC), and the entry to sales of other products the percutaneous IAB gave it, Datascope says the 5% reasonable royalty awarded by the district court is "grossly unreasonable, amounting almost to a confiscation" and constitutes an abuse of discretion.

Fairness to the district court requires recognition that it did take into account all of the factors Datascope highlights. Though SMEC's witness presented the only evidence on the standard royalty given for a nonexclusive license in the medical device field, 678 F. Supp. at 464, 5 USPQ2d at 1969 (a finding Datascope does not challenge), the district court recognized the attributes of the patented invention and the effect those attributes would have had on a negotiated royalty rate.<sup>7</sup> The court stated:

Considering these factors together, the court concludes that even though the evidence indicated that a reasonable royalty in this field ranges from 2% to 4%, I find that the circumstances as they existed would have compelled willing negotiators to go even beyond a 4% royalty. Giving due regard for SMEC's profits, I conclude that willing negotiators would have agreed upon a royalty equivalent to 5% of the infringing sales.

Datascope's real gripe therefore is that the district court did not increase the royalty as much as Datascope would have. Were we sitting *de novo* we might also have found a higher rate reasonable. The role of an appellate court is not, however, to substitute its judgment for that of the district court. The court's opinion here makes clear that its judgment was guided by sound

<sup>7</sup> Because the court recognized the particular attributes of the patented invention and clearly focused on the date infringement began, Datascope's extended attack on the testimony of SMEC's medical field witness is spurious. The district court accepted that testimony solely as evidence of the standard royalty range in the field. It separately determined how much to exceed that range in compensating for the invention's uniqueness.

legal principles. Thus, we cannot reverse the district court's determination absent a conviction that it committed a manifest error of judgment. As Judge Bissell noted in her additional views in *PPG Industries v. Celanese Polymer Specialities Co.*, 840 F.2d 1565, 1572, 6 USPQ2d 1010, 1016 (Fed. Cir. 1988) (quoting Friendly, J., *Indiscretion about Discretion*, 31 Emory L.J. 747, 763 (1982)), a manifest or clear error of judgment occurs "only if we 'come close to finding that the trial court had taken leave of its senses.' Discretion, in this sense, is abused if the record contains no basis on which the district court rationally could have made its decision or if the judicial action is arbitrary, fanciful or clearly unreasonable." Datascope has shown no such abuse.

A vast disparity between actual and hypothetically negotiated profits will rarely be sustainable when the invention was recognized by both parties as highly valuable at the time infringement began and a negotiation is hypothesized. See, e.g., *Sinclair Refining Co. v. Jenkins Petroleum Co.*, 289 U.S. 689, 697-99 (1933). Yet each case must be judged on its own merits in light of the evidentiary record created and introduced by counsel. Datascope's failure even to assert a specific royalty rate it would have accepted or agreed to, let alone sustain and support it with evidence, left the district court without a guidepost for finding a greater royalty and leaves us unpersuaded that its decision was "arbitrary, fanciful or clearly unreasonable" in light of what was presented in the record.

## II. Willful Infringement

Datascope says the court's finding of good faith is clearly erroneous and "based upon a misconception of governing law." We agree.

In analyzing the "totality of the circumstances," *Central Soya Co. v. George A. Hormel & Co.*, 723 F.2d 1573, 1577, 220 USPQ 490, 492 (Fed. Cir. 1983), the district court pointed to the opinion of counsel SMEC sought, saying that opinion "con-

cern[ed] the validity and possible infringements of patents held by Datascope." 678 F. Supp. at 464, 5 USPQ2d at 1970. That was a clearly erroneous evaluation by the district court. That opinion said nothing whatever about the validity of the '339 patent or any Datascope patent, and the opinion's reference to infringement is not only conclusory, but ignores entirely the question of infringement under the doctrine of equivalents. Further, an opinion on equivalents in this case would have been impossible, SMEC's attorneys having never ordered, let alone consulted, the '339's prosecution history before rendering their opinion. *See Underwater Devices, Inc. v. Morrison-Knudsen Co.*, 717 F.2d 1380, 1390, 219 USPQ 569, 576 (Fed. Cir. 1983) (validity and infringement opinion "would generally include an analysis of the file history of the patent.").

Our review of the record convinces us that the district court seriously underestimated Schiff's skepticism regarding the advice of counsel and similarly underestimated the court's own findings about the market pressure and urgency faced by SMEC. *See generally Suessen-Schurr v. Schubert & Salzer*, 829 F.2d 1075, 1084, 4 USPQ2d 1044, 1051 (Fed. Cir. 1987), *cert. denied*, 108 S. Ct. 1022 (1988). Review of the record creates in us the "definite and firm conviction" of mistake in the district court's finding of "honest doubt . . . as to the validity and infringement of Datascope's patents."

The district court's reference to this court's 2-1 decision affirming the judgment of liability was inappropriate in this case. That decision was rendered several years after the date infringement began (*i.e.*, the date employed in determining willfulness under the circumstances of this case), *see Great Northern Corp. v. Davis Core & Pad Co.*, 782 F.2d 159, 166-67, 228 USPQ 356, 360 (Fed. Cir. 1986); *Underwater Devices*, 717 F.2d at 1389-90 219 USPQ at 576 (and authorities cited), and was based on facts unrelated to SMEC's decision on the critical

date.<sup>8</sup> The dissent was on liability, said nothing about willfulness, and was based on the view that infringement under the doctrine of equivalents was precluded by prosecution history estoppel. If SMEC had relied on or even consulted the prosecution history during the period relevant to consideration of willfulness reference to estoppel in the dissent might have relevance. In this case SMEC did not consult the prosecution history. Consequently, the later evaluation of that history in the dissent can neither be attributed to SMEC nor related back to the critical period.

Having been persuaded of clear error in the district court's finding that SMEC's infringement was nonwillful, and having considered the evidence indicating willfulness,<sup>9</sup> we reverse that finding and remand for the court to exercise its discretion in determining the amount that damages should be increased under 35 U.S.C. § 284, which allows an increase of any amount "up to three times the amount found." (Emphasis added). We also remand for the court to exercise its discretion in determining Datascope's claim for attorney fees pursuant to 35 U.S.C. § 285.

### III. Interest

Datascope complains that the district court "erred in 1) providing for annual rather than quarterly or monthly com-

<sup>8</sup> The court's citation of the Seventh Circuit's decision in *Dickey-John Corp. v. International Tapetronics Corp.*, 710 F.2d 329, 348 (7th Cir. 1983) is unavailing. The statement in that case that close questions at trial should ordinarily preclude a finding of willfulness is blunted by the subsequent sentences in the opinion which say: "In this case, however, defendants clearly infringed and the only question regarding their good faith was whether at the time of infringement they had a good faith belief in the invalidity of the patent. . . . [Defendants] will not be permitted to be saved from their flagrant disregard for the patent laws by the fortuity that when the patent in issue was closely scrutinized in this lawsuit, a close question of obviousness was presented."

<sup>9</sup> For reasons not readily apparent, the parties included in the "confidential" briefs the testimony of SMEC's president Schiff relating to the bases for SMEC's decision to infringe after its efforts to design around the patent had failed.

pounding; 2) using the interest rate set by 28 U.S.C. § 1961 rather than the prime rate for the period after January 21, 1988; and 3) declining to require payment by a date certain."

None of Datascope's arguments convinces us that the court abused "the substantial discretion [it has] to determine the interest rate in patent infringement cases." *Gyromat Corp. v. Champion Spark Plug Corp.*, 735 F.2d 549, 556, 557 (Fed. Cir. 1984). Contrary to Datascope's arguments, the court was entitled to credit Schiff's affidavit that SMEC would have been unable to comply with any requirement to report royalties more frequently than annually; we are unconvinced here that the Treasury bill rate of section 1961 fails to "adequately compensate" Datascope; and whether a date certain be advisable, a decision not to set such a date is not an abuse of discretion. We therefore affirm the district court's selection of rates for pre-judgment and post-judgment interest.

## CONCLUSION

The court's damage award is affirmed-in-part and reversed-in-part. The finding of nonwillful infringement is reversed. The court's orders addressing prejudgment and post-judgment interest are affirmed. The case is remanded for calculation of the amount of lost profits on domestic infringing sales, determination of enhanced damages and attorney fees, and such other proceedings as are consistent with this opinion.

AFFIRMED-IN-PART, REVERSED-IN-PART, and REMANDED.

**United States District Court  
District of New Jersey**

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Civil Action No. 81-3948  
ORDER AND FINAL JUDGMENT

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DATASCOPE CORP.,

*Plaintiff.*

v.

SMEC, INC.,

*Defendant.*

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The court having previously held the defendant, SMEC, Inc., liable for infringement of certain patents held by plaintiff, Datascope Corp., and the court having concluded the trial on damages,

It is on this 19th day of January, 1988,

ORDERED and ADJUDGED that the preliminary injunction entered by this court in December, 1981, be and it hereby is made permanent; and it is further

ORDERED and ADJUDGED that SMEC, Inc. shall pay \$113,442.05 to Datascope Corp., representing a reasonable royalty, equivalent to 5% of the infringing sales, and the defendants shall also pay prejudgment interest and costs of suit.

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*/s/ CLARKSON S. FISHER*

Clarkson S. Fisher  
*United States District Judge*

FOR PUBLICATION

**United States District Court  
District of New Jersey**

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Civil Action No. 81-3948

**OPINION**

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DATASCOPE CORP.,

*Plaintiff,*

v.

SMEC, INC.,

*Defendant.*

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FISHER, District Judge.

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This is a patent infringement suit in which this court has previously found the defendant, SMEC, Inc., liable for infringement of certain patents held by plaintiff, Datascope Corporation. *Datascope Corp. v. SMEC, Inc.*, 594 F. Supp. 1306 (D.N.J. 1984), *aff'd and rev'd in part*, 776 F.2d 320 (Fed. Cir. 1985). Having concluded a trial on the liability phase of this case, the following constitute my findings of fact and conclusions of law as to damages.

## I. Applicable Law

Damages in a patent infringement suit are governed by 35 U.S.C. § 284, which provides:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed.

The court may receive expert testimony as an aid to the determination of damages or of what royalty would be reasonable under the circumstances.

In *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 507 (1964), the Supreme Court stated:

But the present statutory rule [35 U.S.C. §284] is that only "damages" may be recovered. These have been defined by this court as "compensation for the pecuniary loss he [the patentee] has suffered from the infringement, without regard to the question whether the defendant has gained or lost by his unlawful acts." *Coupe v. Royer*, 155 U.S. 565, 582, 39 L.Ed. 263, 269, 15 S.Ct. 199 (1895). They have been said to constitute "the difference between his pecuniary condition after the infringement, and what his condition would have been had the infringement not occurred."

While the statute provides that a patent holder who has suffered infringement at the hands of another is to be awarded, at the very least, a "reasonable royalty," the basic question remains, "Had the infringer not infringed, what would patent holder-licensee have made?" *Livesay Window Co. v. Livesay Industries, Inc.*, 251 F.2d 469, 471 (5th Cir. 1958), quoted in *Aro*

*Manufacturing Co., supra*, at 507. As such, a successful claimant in an infringement suit may recover his lost profits where it can be demonstrated that the patent holder would have made the sales, "but for" the infringing activity. *Bio-Rad Laboratories, Inc. v. Nicolet Instrument Corp.*, 739 F.2d 604, 616 (Fed. Cir. 1984); *Gyromat Corp. v. Champion Sparkplug Co.*, 735 F.2d 549, 553 (Fed. Cir. 1984).

In *Panduit Corp. v. Stahlin Bros. Fiberworks, Inc.*, 575 F.2d 1152 (6th Cir. 1978), the court articulated the requirements of the aforementioned "but for" rule:

To obtain as damages the profits on sales he [the patentee] would have made absent the infringement, i.e., the sales made by the infringer, the patent owner must prove: (1) demand for the patented product, (2) absence of acceptable non-infringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made.

To recover lost profits, the prevailing patent owner carries the burden of establishing that all four elements of the "but for" test are fulfilled. Should he fail in this regard, he is entitled only to a reasonable royalty. 35 U.S.C. § 284.

Although § 284 provides no particular method of calculating a reasonable royalty, there are a number of identifiable factors to be considered. In *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 1970), the court noted that a hypothetical license negotiation

... would involve a marketplace confrontation of the parties, the outcome of which would depend upon such factors as their relative bargaining strengths; the anticipated amount of profits that the prospective licensor reasonably thinks he would lose as a result of licensing the patent as compared to the anticipated royalty income; the anticipated amount of net profits that the prospective licensee reasonably thinks he will make;

the commercial past performance of the invention in terms of public acceptance and profits; the market to be tapped; and any other economic factor that normally prudent businessmen would, under similar circumstances, take into consideration in negotiating the hypothetical license.

*Id.* at 1122. Of course, the court recognized that subsumed within the definition of a reasonable royalty is the infringer's ultimate profit. Thus, it is equally necessary to consider the amount a licensee would be willing to pay. *Id.* at 1122.

## II. Findings of Fact.

Throughout the infringing period, 1981 through 1984, there were three suppliers of percutaneous balloons, Datascope, SMEC, and Kontron. Datascope and Kontron divided 96% of the market, while SMEC retained 4% between 1981 and 1984.

Datascope's primary competitor in the market was Kontron. Datascope's sales projections throughout the infringing period reveal that Datascope sought to increase its market share at the expense of Kontron. These sales projections also reveal SMEC's market share remained constant at 4%.

SMEC entered the market for percutaneous balloons in March, 1981. At that time, many doctors were wary of the percutaneous method for medical reasons. Although a precise moment in time is unascertainable, the percutaneous procedure gradually gained acceptance and by 1983-1984 had become the method of choice among doctors.

Despite the early skepticism in the medical community, many doctors purchased the SMEC balloon in 1981. This is due primarily to the high esteem in which the doctors held Peter Schiff, the President of SMEC, and the doctors' previous experience with SMEC's products.

These doctors testified that it was because of Schiff that they purchased the SMEC balloon at a point in time earlier than they would normally have adopted the percutaneous method. Dr. Gerald Geisler's testimony is representative:

Q. Why did you choose to use the SMEC percutaneous balloon, as opposed to anybody else's percutaneous balloon?

A. Well, from the beginning of our experience with balloon pumping, we had worked very closely with Mr. Schiff and had a great deal of confidence in his products and in his advice.

Q. If SMEC had not come out on the market with a percutaneous balloon in 1981, would you have switched to a percutaneous balloon when you did?

A. No.

Q. Why not?

A. Mainly because I didn't like the concept of the percutaneous balloon.

Percutaneous balloons did, however, offer a number of benefits over surgical balloons. Prior to the introduction of the percutaneous technology, surgical balloons were the catheter of choice among doctors. Among the advantages of percutaneous insertion are that it requires use of local anaesthesia to a lesser extent than does the surgical method; a percutaneous balloon can be inserted more quickly and easily into the patient; and it avoids a painful incision while the patient is under local anaesthesia.

As these advantages became known among doctors, the percutaneous method gained greater acceptance. The court finds that regardless of the doctors' high regard for Schiff and SMEC, these doctors would have adopted the percutaneous method because of these advantages.

Of the 4% of the market which SMEC held during the infringing period, its largest customers were foreign hospitals. Indeed, some 13% of the infringing sales were made to the foreign customers. I find that Datascopes production and marketing operations were physically capable of absorbing much of SMEC's 4% market share, but also that Datascopes had no capability of capturing the sales made to SMEC's foreign customers. Datascopes had sales representatives assigned to fourteen sales regions throughout the United States. There is no evidence that Datascopes sought to compete with SMEC for its sales to foreign customers. Indeed, the evidence reveals that Datascopes sales representatives never even contacted these foreign customers. This is so despite the testimony of Robert Rewolinski, the former national sales manager for Datascopes, that Datascopes sales representatives were instructed to go after all competitive accounts.

As previously noted, Kontron was Datascopes major competitor in the percutaneous balloon catheter market. Kontron entered the market in 1981 with a dual lumen balloon catheter. Upon introduction of Kontron's IAB, it immediately captured a significant market share. This market share was maintained throughout the infringing period.

Datascopes has instituted an infringement suit against Kontron in the United States District Court for the District of Massachusetts. Datascopes alleges in that suit that both Kontron's single lumen and dual lumen infringe its '339 patent. Kontron has been preliminarily enjoined from selling the single lumen device and, although the court refused to enjoin the sale of the dual lumen IAB, there was a finding that Datascopes had a reasonable likelihood of success in establishing infringement by the dual lumen device. *Datascopes Corp. v. Kontron, Inc.*, 611 F. Supp. 889, 894-95 (D. Mass. 1985).

The Federal Circuit, however, commented unfavorably on Datascopes "equivalent to an equivalent" theory of establishing infringement. *Datascopes Corp. v. Kontron, Inc.*, 786 F.2d 398

(Fed. Cir. 1986). In any event, the District Court of Massachusetts' finding that Datascope had a reasonable likelihood of success is not dispositive here. To establish its claim for lost profits, Datascope must show to a preponderance of the evidence that there were no noninfringing alternatives. In this regard, Datascope undertakes a heavy burden.

There are significant differences in the Kontron dual lumen balloon and the Datascope single lumen balloon which is the subject of the '339 patent. First, the Kontron device uses a hollow metal cylinder support member, as opposed to a rod or wire as described in the Datascope patent. Second, the Datascope patent does not operate as a dual lumen device because the structural configuration of the support member in the Datascope patent would cause gas and blood to mix. I find that, based on the evidence submitted at trial and for the purposes of this case, the Kontron balloon is a noninfringing alternative to the patented device.

The defendant submits several other possible noninfringing alternatives. SMEC may not, however, rely on its 1980 prototype of a prewrapped balloon as a noninfringing alternative. Although this prewrapped prototype was developed at the same time Schiff developed the single lumen device which was ultimately found to be infringing, Schiff subsequently abandoned the prototype in favor of the single lumen device. The evidence reveals that Schiff, himself, had doubts as to the efficacy of the design. Although Schiff testified that he subsequently concluded his early uncertainty as to the design of the 1980 prototype was unfounded, this testimony is hindsight and made with the benefit of several years of familiarity with the technique.

Moreover, the prewrapped design of the 1980 prototype was a significant departure from the twisting style which was ultimately found to have infringed Datascope's patent. Up to 1981, the only percutaneous design which had been successfully utilized was the twisting method developed by Datascope. Given the apprehension within the medical community in 1981, it is indeed

speculative to conclude that the 1980 prewrapped prototype would be acceptable as a viable market alternative to the twisting device. Finally, I note that the 1980 prewrapped model was never brought to the market. I conclude, therefore, that the 1980 prewrapped design was not available as a noninfringing alternative.

Shortly after this court enjoined the sale of SMEC's twisting balloon, Schiff introduced the "Sidewinder" percutaneous balloon. The "Sidewinder" is a prewrapped balloon which evolved from the prototype developed by Schiff in 1980. The "Sidewinder" does not infringe on Datascope's '339 patent.

The Food and Drug Administration's 510(k) application for the "Sidewinder" was filed by SMEC in August, 1983. The application was approved on October 15, 1984. Although Schiff testified that the "Sidewinder" was developed to the point it could have been commercially manufactured by June, 1982, and that, had the FDA application been filed in 1982, approval could have been obtained within four to five months. I find this testimony unpersuasive. The simple fact remains that FDA approval for the "Sidewinder" was not obtained until October, 1984. This court preliminarily enjoined SMEC from the sale of the twisting balloon in December 1984. Accordingly, the court concludes that the "Sidewinder" was not available as a noninfringing alternative, inasmuch as the "Sidewinder" could not have been brought to market absent FDA approval, and that approval was not obtained until October, 1984. Datascope's arguments concerning the earlier time frame in which the "Sidewinder" could have been brought to market are speculative at best.

### III. Conclusions of Law

The preliminary injunction entered in this action is made permanent. SMEC has been adjudged to have infringed Datascope's '339 patent. In *Smith International, Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1581 (Fed. Cir. 1983), the court stated, "We hold that where validity and continued infringement

have been clearly established, as in this case, immediate irreparable harm is presumed." Likewise, the entry of a permanent injunction in this case is appropriate.

a. *Lost Profits*

As noted above, the principal question with regard to lost profits is whether the patent holder would have made the sales "but for" the presence of the infringing product on the market. The court concludes that Datascope has not carried its burden of proof in establishing entitlement to lost profits and, therefore, will be awarded a reasonable royalty.

In particular, the third element set forth in *Panduit Corp.*, *supra*, requires the patentee to show its manufacturing and marketing capability to exploit the demand for the product. In this regard, two points are significant. First, in early 1981 and for a short time thereafter, the market demand for the product was significantly less than what it would later become. Indeed, several doctors testified that at that time they were not ready to fully accept the percutaneous method. The evidence clearly shows that many of the sales made at that time by SMEC were made because of the doctors' confidence in Schiff. Further, the evidence showed that many of SMEC's customers would not have switched from using surgical balloons to percutaneous balloons but for that faith in Schiff.

Second, and more significantly, Datascope has made no showing that it could have captured the sizable number of foreign sales made by SMEC. Although its sales team was divided into regions throughout the United States, no sales representatives were assigned to foreign customers. Indeed, no attempt was ever made at making inroads in the area.

Datascope has also failed to satisfy the second element of the *Panduit* test, which requires the absence of acceptable noninfringing substitutes. There were, however, three sellers in the relevant market. This court has concluded that, for the purposes of this action, Kontron's dual lumen balloon is an accepta-

ble noninfringing alternative to Datascope's '339 patent. It would strain credulity to hold the Kontron balloon to be an unacceptable alternative. Immediately upon its introduction into the market in 1981, Kontron captured a significant portion of the market. Indeed, for a time Datascope's sales had decreased upon the arrival on the market of the Kontron device.

The presence of the Kontron dual lumen balloon on the market precludes a finding that Datascope would have made the sales which were made by SMEC. There is no presumption that SMEC's customers would have purchased from Datascope. *Oil Well Improvements Co. v. Acme Foundry and Machine Co.*, 31 F.2d 898, 901 (8th Cir. 1929). Nor is there sufficient evidence to award lost profits based on the market share held by Datascope vis-a-vis Kontron. In *Baumstimler v. Rankin*, 677 F.2d 1061 (5th Cir. 1982), the court stated:

In this case, the district court determined that the competing tool, that sold by Cavins, held 10% of this market. This alone is not sufficient to determine that Baumstimler would have received 90% of the market since possibly the infringers cut only Baumstimler's market but that of Cavins as well.

*Id.* at 1072. Herein, SMEC competed with both Datascope and Kontron. Although Datascope suggests that if the Kontron device is held to be noninfringing an award of 65% of its lost profits is appropriate, reflecting its share of the market, I do not agree. The patent holder must prove to a "reasonable probability" the portion of the infringing sales it would have made. *Hughes Tool Co. v. W. Murphy Industries, Inc.*, 491 F.2d 923, 930 (5th Cir. 1973). The decision to purchase a particular balloon, however, is a decidedly subjective one. The president of Datascope conceded as much:

Q. Therefore, between the period beginning 1981 and the end of 1984, you knew that SMEC was selling percutaneous intra-aortic balloons; isn't that true?

A. Yes.

Q. Why do you think people were buying them?

A. They prefer to buy SMEC devices.

Q. In the final analysis, sir, it is the subjective decision of your purchasers as to why the purchaser chooses one or another; isn't that so?

A. Yes.

Tr. May 19, p. 60. Although Datascope offers a number of comparisions between its device and Kontron's, suggesting Datascope would have garnered these sales, these contentions are, on the whole, unpersuasive. Datascope has failed to carry its burden of proof for a number of reasons. Several of SMEC's customers indicated an unwillingness to use Datascope's balloon. The original Datascope balloon had evoked a number of complaints. There is nothing in the record to suggest that either Datascope or Kontron could have captured the early sales made by SMEC, in view of both the skepticism of the technique within the medical community at that time, and the loyalty of SMEC's customers. Indeed, the evidence establishes that, at the time, SMEC's customers would not have adopted the percutaneous balloons manufactured by any other company. In all probability, these sales would not have been made.

Finally, a noninfringing alternative, i.e., the Kontron balloon, had captured a sizable portion of the market upon its introduction. As in *Baumstimler, supra*, there is a possibility that SMEC's sales after the technology gained widespread acceptance cut into Kontron's potential market as well. Viewed together, these factors compel the conclusion that Datascope has not established an entitlement to any or all of its claim of lost profits. Accordingly, the court will award a reasonable royalty.

b. *Reasonable Royalty*

In fixing a reasonable royalty as damages, the court in *Panduit Corp., supra*, stated:

The key element in setting a reasonable royalty after determination of validity and infringement is the

necessity for return to the date when the infringement began.

*Id.* at 1158. In *Georgia-Pacific Corp. v. United States Plywood Corp., supra*, a reasonable royalty was described in this way:

The sum allowed should be reasonable and that which would be accepted by a prudent licensee who wished to obtain a license but was not so compelled and a prudent patentee, who wished to grant a license but was not so compelled.

*Id.* at 1121, quoting *Horvath v. McCord Radiator and Mfg. Co.*, 100 F.2d 326, 335 (6th Cir. 1938). Thus, in considering a "hypothetical negotiation," conducted in March, 1981, when the infringement began, several facts are necessary to set the stage. Further, the court must assume that both parties were privy to all pertinent information. *Georgia-Pacific Corp., supra*, at 1121. At that time, Datascope held a 100% market share in the percutaneous IAB field. At that time, Schiff was having difficulty in successfully completing his prewrapped prototype. Indeed, those difficulties led him to adopt the twisting style design which was ultimately found to be infringing. Among the considerations brought to bear by Schiff in adopting the infringing design was the fact that that particular device was the only one that had been successfully used to date. Given the uncertainty existing at the time with regard to the percutaneous technology, the only practical device available to Schiff was the twisting design. Moreover, Schiff considered Datascope's introduction of a percutaneous balloon to be a significant development in the market. Considering Datascope's then 100% market share alongside SMEC's difficulty in developing an alternative noninfringing device, as well as its desire to enter a market deemed significant by its president, I conclude that SMEC would have been willing to pay a higher royalty rate than the modest rate it now argues for. Likewise, given Datascope's 100% market share, I conclude that Datascope would have demanded a favorable royalty rate, particularly in view of the fact that it would be granting a license to a competitor in a market of limited participants.

SMEC's claim that the royalty should not exceed 1.75% of the infringing sales is rejected. The report and testimony of SMEC's expert on this point are based primarily on the assumption that the patent was relatively easy to design around, as evidenced by the relative ease and speed with which SMEC's "Sidewinder" balloon was brought to the market in 1985. A simple response to this contention is that the "Sidewinder" was brought to the market in 1985 and the royalty rate must be determined with reference to the facts as they existed in early 1981. SMEC argues that because of the relative ease in developing the "Sidewinder" balloon, its barrier to entry into the percutaneous balloon market was relatively insignificant. In view of the facts as they existed in March, 1981, noted above, the court's conclusion is to the contrary, to wit: I conclude that SMEC faced a relatively significant barrier to entry into that market. Indeed, SMEC lost customers during the period that Datascope was the only company on the market with a percutaneous balloon. Further, the evidence revealed a certain urgency on SMEC's part prior to entering the percutaneous market. Schiff's deposition testimony concerning the filing of the FDA 510(k) applications in December, 1980, is illustrative:

I listed the 510(k) application of December 19 as being a minor modification of my application of December 1. I wanted that date, December 1, to prevail. I did not want this listed as a new application and lose 19 more days, lose 18 more days; and immediately after that submission, within several days, we sent out balloons, the twisting design, to approximately ten or fifteen doctors. . . .

SMEC's alternative argument that a reasonable royalty should not exceed 2.5% is also rejected. This, too, is based on the assumption that SMEC faced little difficulty in entering the market. Quite simply, it is an assumption not warranted in fact.

Among the factors to be considered in establishing a royalty is any previous royalty standard within the industry. SMEC's expert, Ralph Lilore, testified that in the medical field a reason-

able royalty ranges between 2% and 4% for a nonexclusive license. Although the court has rejected Lilore's conclusion, there is no evidence which contradicts these ranges. As noted previously, Datascope would have demanded a more favorable royalty from SMEC under the circumstances existing in March, 1981. Given the importance attached to market entry by SMEC, as well as its difficulty in designing around the '339 patent and Datascope's then existing 100% market share, I further conclude that Datascope would have been in a uniquely strong bargaining position.

Of the list of pertinent factors noted in *Georgia-Pacific Corp., supra*, the court noted two considerations applicable herein:

8. The established profitability of the product made under the patent; its commercial success; and its current popularity.
9. The utility and advantages of the patent property over the old modes or devices, if any, that have been used for working out similar results.

318 F. Supp. at 1120.

In this case, the court cannot ignore the widespread acceptance that the percutaneous technology subsequently achieved. Despite the aforementioned early doubts within the medical community, the method was rapidly accepted within a year to a year and a half. By 1984, when this suit was instituted, the percutaneous technology had all but replaced the prior art. The court has already noted several of the particular advantages of this method, as opposed to the use of surgical balloons. Moreover, the evidence reveals that the relatively prompt acceptance of the technology was not lost upon Schiff and SMEC.

Considering these factors together, the court concludes that even though the evidence indicated that a reasonable royalty in this field ranges from 2% to 4%, I find that the circumstances as they existed would have compelled willing negotiators to go even beyond a 4% royalty. Giving due regard to SMEC's concern for

its profits, I conclude that willing negotiators would have agreed upon a royalty equivalent to 5% of the infringing sales.

c. *Treble Damages*

Where the proof at trial shows the infringement to be willful, the damage award may be trebled. Where a potential infringer has notice of the rights of another in a patent, the potential infringer has a duty to exercise due care and to determine whether or not he is infringing. *Ralston Purina Co. v. Farr-Mar Co., Inc.*, 772 F.2d 1570, 1577 (Fed. Cir. 1985). In the present case, SMEC sought advice of counsel with regard to Datascope's patents prior to entering the market. Merely obtaining an opinion, however, is not dispositive on a question of whether or not the infringer acted in good faith and without intent to infringe. *Kori Corp. v. Wilco Marsh Buggies and Drag Lines, Inc.*, 761 F. 2d at 656.

The court concludes that SMEC's infringement was not willful. In *Lamb, Inc. v. Johns Manville Corp.*, 668 F.2d 462, 474 (10th Cir. 1982), the court stated, "An infringer who reasonably doubted the patent was valid has not willfully infringed the patent." Herein, SMEC sought an opinion from its attorneys concerning the validity and possible infringements of patents held by Datascope. Although SMEC was faced with pressure to enter the market, it sought counsel's advice at a time when Schiff was still attempting to develop his noninfringing prewrapped prototype. It was not until Schiff abandoned that effort due to the prototype's failure to work consistently that the market pressure on SMEC increased. Although Schiff retained some skepticism, that does not preclude a finding that the infringement was not willful. The court concludes that, at a minimum, an honest doubt existed as to the validity and infringement of Datascope's patents.

Moreover, in *Dickey-John Corp. v. Intern. Tapetronics Corp.*, 710 F.2d 329, 348 (7th Cir. 1983), the court noted, "where close questions are presented regarding the infringement

issue, obviously a finding of willful and wanton infringement is ordinarily inappropriate." Indeed, the Federal Circuit, in affirming the judgment of liability, was not unanimous. *Datascope v. SMEC*, 776 F.2d at 328 (Judge Davis, dissenting). Therefore, Datascope's request for treble damages and attorney's fees is denied. For the same reasons, the claim for attorney's fees pursuant to 35 U.S.C. 285 is denied.

d. *Pre-Judgment Interest*

In *General Motors v. Devex Corp.*, 461 U.S. 648, 655 (1983), the Supreme Court held:

The standard governing the award of prejudgment interest under § 284 should be consistent with Congress's overriding purpose of affording patent owners complete compensation. In light of that purpose, we conclude that prejudgment interest should ordinarily be awarded. In the typical case an award of prejudgment interest is necessary to ensure that the patent owner is placed in as good a position as he would have been had the infringer entered into a reasonable royalty agreement.

*See also Underwater Devices, Inc. v. Morrison-Knudson Co., Inc.*, 717 F.2d 1380, 1389 (Fed. Cir. 1983). On the basis of the substantial record before this court I find no justification for withholding an award of prejudgment interest in this case. See *Devex Corp.*, *supra*, at 657.

An order accompanies this opinion.

January 19, 1988.

**United States Court of Appeals  
for the Federal Circuit**

88-1266, -1279 and 89-1104, -1154

**DATASCOPE CORP.,**

*Plaintiff-Appellant.*

v.

**SMEC, INC.,**

*Defendant/Cross-Appellant.*

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**JUDGMENT**

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**UNITED STATES DISTRICT COURT FOR THE  
DISTRICT OF NEW JERSEY**

On appeal from the

in Case No(s). 81-3948

This Cause having been  
heard and considered, it is  
Ordered and Adjudged:

Affirmed-in-Part, Reversed-in-  
Part, and Remanded

Entered by Order of the Court

/s/ FRANCIS X. GINDHART

Francis X. Gindhart, Clerk

Dated: July 6, 1989

Issued as a Mandate: August 28, 1989

Costs: Against Cross-Appellant

Printing: \$2,259.12

Total: \$2,259.12

**United States Court of Appeals  
for the Federal Circuit**

88-1266, -1279 and 89-1104, -1154

**DATASCOPE CORP.,**

*Plaintiff-Appellant.*

v.

**SMEC, INC.,**

*Defendant/Cross-Appellant.*

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**ORDER**

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**ORDER**

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Before MARKEY, Chief Judge, FRIEDMAN, Circuit Judge,  
and ARCHER, Circuit Judge.

A petition for rehearing having been filed in this case,  
UPON CONSIDERATION THEREOF, it is ORDERED that  
the petition for rehearing be, and the same hereby is, denied.

The suggestion for rehearing in banc is under consideration.

The mandate will issue on August 21, 1989.

FOR THE COURT,

/s/ FRANCIS X. GINDHART  
Francis X. Gindhart, Clerk

Dated: August 14, 1989

cc: STEVAN J. BOSSES  
CHARLES A. REID, III

DATASCOPE V SMEC, 88-1266, -1279  
and 89-1104, -1154

Note: This order has not been prepared for publication in a reporter.

**United States Court of Appeals  
for the Federal Circuit**

88-1266, -1279 and 89-1104, -1154

**DATASCOPE CORP.,**

*Plaintiff-Appellant,*

v.

**SMEC, INC.,**

*Defendant/Cross-Appellant.*

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**ORDER**

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**ORDER**

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A suggestion for rehearing in banc having been filed in this case,

UPON CONSIDERATION THEREOF, it is

ORDERED that the suggestion for rehearing in banc be, and the same hereby is, declined.

FOR THE COURT,

/s/ FRANCIS X. GINDHART

Franics X. Gindhart, Clerk

Dated: September 7, 1989

cc: STEVAN J. BOSSES  
CHARLES A. REID, III

DATASCOPE V SMEC, 88-1266, -1279 and 89-1104, -1154  
(DCT 81-3948)

Note: This order has not been prepared for publication in a reporter.

Rewolinski—cross

... expense of Kontron, did it not?

- A. My belief was that it came from both.
- Q. That was not borne out by the document that you just reviewed which came from your company files; is that correct?
- A. Yes sir.
- Q. After the SMEC percutaneous balloon and the Kontron percutaneous balloon came on the market in early 1981, did Datascope change the design or offer a new design of its percutaneous balloon?
- A. Yes sir.
- Q. And in fact, in the latter part of 1981, it offered balloons which contained wrapping knobs at the proximal end of the catheter somewhat like the Kontron and the SMEC balloons; is that correct?
- A. Yes sir.
- Q. And it brought out a dual lumen balloon like the Kontron balloon?
- A. Yes sir.
- Q. And that was because the market appreciated the differences and the improved features from those wrapping knobs and that dual lumen feature and you wanted to take advantage of that, is that true?
- A. I don't quite understand your question.
- Q. Were there people in the market who prepared wrapping ...

